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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,989

03/08/2006

Yukikazu Shoji

SAA-007

2892

32628

7590

01/30/2009

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EXAMINER

HARMON, CHRISTOPHER R

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

01/30/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,989	<b>Applicant(s)</b> SHOJI ET AL.	
	<b>Examiner</b> Christopher R. Harmon	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,8-10,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8-10,12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/24/08 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3-4, 8-10, 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The newly added limitations to claim 1 concerning "a speed at which..." and "said first speed" create confusion as to the invention. Firstly "a speed" is not a structural limitation, and while it is recognized that the speed of the web is controlled, the speed settable to a cut-off length... does not specifically refer to the speed of either conveyor or processor. Furthermore the "said first speed" refers to the first conveyor –part of the cut-off unit (claim 1, lines 3-7) and if the web conveying speed is settable according to a cut-off length, it is indefinite if the first speed is set to become equal to the web conveying speed as all speeds referred to are the same. To avoid confusion the

examiner suggests to claim structural limitations ie. conveyors, control means/drives etc. and limitations directed towards their individual function rather than in terms of a product to be worked upon as "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666 (Bd. App. 1969).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 10, 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen (US 4,721,294).

Petersen discloses a folding device in a printing unit, (rotary or otherwise) comprising cut-off unit with variable speed cutting mechanisms/rollers 5a, 5b for receiving the web 1a 1b and cutting as desired; first variable speed belt conveyors 99, 100; second variable speed belt conveyors 97, 98 positioned downstream one another for controlling the speed of the web (deceleration); and downstream processor (folding/collecting device); see figures 1-4. The cutting system is variable to create separation of cut sheets 7a and 7b; see column 2, lines 40+. The first belt conveyors operate at a speed V1 than that of second belt conveyors 97, 98 which act to slow sheet conveying speed from V1 to V2; see column 6, lines 1+ and controllably deliver the

sheets to the downstream processing stations including inserting station 40; folding station 38 (perpendicular fold to conveying direction). Petersen discloses abutting portion comprising stops 31a – 31d.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 8-10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Reffert (US 4,491,310) in view of Vijuk (US 4,812,195).

Reffert discloses a folding device for the production of printed booklets (ie. downstream a printing machine, rotary or otherwise) comprising cut-off unit with cutting mechanisms/rollers 14 for receiving the web; first belt conveyor 10a; second belt conveyor 10b; and downstream processor (folding/collecting device). The first belt conveyor 10a operates at a slower speed than that of second belt conveyor 10b in order to gradually accelerate (vary the speed of) the cut sheets; see figure 1, column 7, lines 4+. Collecting/catching cylinder 1 with grippers 2, folding blades 3 and folding cylinder 4 form folded creases transversely to the conveying direction as known in the art. While Reffert discloses operating the second belt conveyor at a higher speed than first belt conveyor and the sheet conveying speed accelerates during its transfer to match the speed of the downstream processor, it is not labeled a variable speed conveyor.

Furthermore the second belt conveyor is not disclosed to slow to the speed of the first conveyor, however Vijuk discloses variable speed belt conveyor 108 for altering the speed of a cut product as desired for transporting downstream to a folding processor; see figure 1, column 7, lines 16+. It would have been obvious to one of ordinary skill in the art to use a variable speed drive for controlling the belt speed of the second conveyor. Note that Reffert discloses slowing products by abutting stop member 23 for control purposes of the products while transported by the second belt conveyor.

Regarding claim 9, Reffert does not directly disclose decelerating the second belt to match the speed of the first belt, however while features of an apparatus may be recited either structurally or functionally, claims directed towards an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473-78, 44 USPQ2d 1429-32 (Fed.Cir. 1997) and *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed.Cir. 1990). Furthermore, a limitation directed to an intended use of an apparatus or a process requires a structural difference or a manipulative difference between the claimed invention and the prior art. See *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963); *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962); *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed.Cir. 1997).

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (US 4,721,294) in view of Stab (US 6,019,714).

Petersen does not directly disclose a first partial cut-off mechanism before the cut off unit 5a, 5b, however Stab discloses a folding apparatus comprising perforators 4 and cut-off cylinders 6 with conveying belt pair devices 8-9, 11-12, 16-17; 18-19; 21-22, 23-24 for decelerating the webs to conform gradually to the processing devices 28-32. Conveyor belt pairs 8-9 forward the sheets to the first cut-off device/perforator 4; see figure 1. It would have been obvious to one of ordinary skill in the art to include a first cut off device (perforator) and nip conveyor belt system as disclosed by Stab in the invention to Petersen in order to partially cut the sheets during transfer and controllably deliver them downstream.

### ***Response to Arguments***

9. Applicant's arguments filed 12/22/08 have been fully considered but they are not persuasive. The manner of control of the device is not claimed as argued, see above rejection under 35 USC 112. While features of an apparatus may be recited either structurally or functionally, claims directed towards an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473-78, 44 USPQ2d 1429-32 (Fed.Cir. 1997) and *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed.Cir. 1990).

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Harmon whose telephone number is (571) 272-4461. The examiner can normally be reached on Monday-Friday from 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher R Harmon/  
Primary Examiner, Art Unit 3721